ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX-126-1-7477; FRL-___]

Approval and Promulgation of Implementation Plans; Texas; the Dallas/Fort Worth Nonattainment Area; Ozone.

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA is proposing to approve the 1-hour ozone Attainment Demonstration State Implementation Plan (SIP), the Post 96 Rate-of-Progress (ROP) plan SIP, and the 15% ROP plan SIP for the Dallas/Fort Worth (DFW) serious ozone nonattainment area. The EPA is also proposing to extend the attainment date for the DFW area to November 15, 2007, from November 15, 1999, based on transport from the Houston/Galveston/Brazoria (HGA) ozone nonattainment area; approve the Motor Vehicle Emissions Budgets contained in the Attainment Demonstration SIP and the Post 1996 ROP plan SIP; approve the State=s enforceable commitment to perform a midcourse review and submit a SIP revision to the EPA by May 2004; approve the State=s enforceable commitment to revise the SIP Motor Vehicle Emissions Budgets using the MOBILE6 on-road emissions model; approve revisions to the 1990 base year inventory; and find that the DFW area meets the Reasonably

Available Control Technology (RACT) requirements for major sources of volatile organic compounds (VOC) emissions. The EPA is also proposing to convert the conditional, interim approval of the DFW 15% plan (63 FR 62943) to a full approval because the requirements for full approval appear to have been met. This proposed action is based on the requirements of the Federal Clean Air Act (the Act) related to ozone demonstrations.

DATES: Written comments must be received on or before [Insert date 60 days from date of publication in the Federal Register].

ADDRESSES: Written comments on this action should be addressed to Mr. Thomas H. Diggs, Chief, Air Planning Section (6PD-L), at the EPA Region 6 Office listed below. Copies of documents relevant to this action, including the Technical Support Document (TSD) are available for public inspection during normal business hours at the following location.

Environmental Protection Agency, Region 6, Air Planning Section (6PD-L), 1445 Ross Avenue, Dallas, Texas 75202-2733.

Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park Circle, Austin, Texas 78753.

Anyone wanting to examine these documents should make an

appointment with the appropriate office at least two working days in advance.

FOR FURTHER INFORMATION CONTACT:

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I. ATTAINMENT DEMONSTRATION AND ATTAINMENT DATE

A. Proposed Action

What action are we taking?

We are proposing to approve the transport demonstration and attainment demonstration SIP developed for the DFW ozone nonattainment area because they meet the Clean Air Act. We believe that the State has adequately followed our 1998

Transport Guidance for demonstrating transport, and that the States transport demonstration analyses indicate that there are impacts of ozone and ozone precursor transports from the

upwind HGA area affecting the DFW area. In addition, we believe that the modeling, the provided weight-of-evidence analyses, and the analysis of transport of ozone and ozone precursor compounds from the HGA area, demonstrate that the control strategy chosen by the State will provide for attainment of the ozone standard. It is our technical position that the control strategy will provide for attainment of the ozone standard by November 15, 2007.

We are proposing to approve the DFW 1-hour ozone nonattainment area attainment demonstration SIP; the Statess request for an extension of the attainment date to November 15, 2007, while retaining the areas current classification as serious; the Motor Vehicle Emissions Budgets; the Statess enforceable commitment to conduct a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration) and to submit a mid-course review SIP revision, with recommended mid-course corrective actions, to us by May 1, 2004; the Speed Limit Reductions in nine counties (including the DFW 4-county area; Dallas, Tarrant, Collin, and Denton Counties); a Voluntary Mobile Emissions Program in nine counties (including the DFW 4-county area); Transportation Control Measures in the DFW area; the 15% ROP Plan, the Post-

1996 ROP Plan; revisions to the 1990 base year inventory; and the States enforceable commitment to performing new mobile source modeling for the DFW area, using MOBILE6, our on-road mobile emissions factor computer model, within 24 months of the models release; and, if transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, transportation conformity will not be determined until Texas submits a motor vehicle emissions budget which is developed using MOBILE6 and which we find adequate. We are also proposing to find that the DFW area meets all remaining outstanding VOC RACT requirements for major sources.

If the subsequent analyses conducted by the State as part of the mid-course review indicate additional reductions are needed for the DFW area to attain the ozone standard, we will require the State to implement additional controls as soon as possible which demonstrate attainment through photochemical grid modeling. We cannot finalize the proposed action upon the Attainment Demonstration SIP, the States request for an extension of the attainment date, and the MVEB contained in the Attainment Demonstration SIP unless and until we have fully approved all of the control measures relied upon in the States Attainment Demonstration SIP for the DFW area and the

control measures required by the Act for a serious area such as the DFW area. See section F., Action needed on Control

Measures for a complete list of the rulemaking actions which must be completed before we can finalize action on the DFW

Attainment Demonstration SIP, the attainment date extension, and the Attainment Demonstration SIP=s MVEB. Furthermore, we cannot finalize action on these three items unless and until the Governor submits the finally adopted enforceable commitment regarding MOBILE6. The State has begun its public comment process on an enforceable commitment and has committed to performing new mobile source modeling for the DFW area, using MOBILE6, within 24 months of the model=s release. The public hearing is scheduled for January 4, 2001.

Was the submittal addressed in public hearings and adopted by the State?

Four Public hearings were held in the DFW area on January 26 and 27, 2000. The State formally adopted the submittal on April 19, 2000. In addition, the State held six other public hearings in other cities on the submittal. The Governor of Texas submitted the Attainment Demonstration SIP, a request for extension of the attainment date for the DFW ozone nonattainment area, adopted rules, orders and initiatives, and the mid-course commitment on April 25, 2000.

The State has gone forward with its public participation requirements on a commitment to performing new mobile source modeling for the DFW area, using MOBILE6. The public hearing on this commitment is scheduled for January 4, 2001. We anticipate that the Governor of Texas will submit this adopted enforceable commitment in the Spring of 2001. The Governor also submitted after public notice and hearing, the Post 1996 ROP Plan and revisions to the 1990 base year inventory on October 25, 1999.

B. Attainment Demonstration Contents

What are the contents of the attainment demonstration submittal?

The April 25, 2000 submittal, concerning the ozone attainment demonstration and an extension of the attainment date for the DFW ozone nonattainment area, contains:

- 1. A photochemical modeling demonstration and additional weight-of-evidence analyses supporting the photochemical modeling demonstration,
- 2. An accompanying control strategy, comprised of:
 - a. Regulations and initiatives in the DFW area(and their documentation);
 - b. Regulations and initiatives in certain counties surrounding the DFW area (and their

documentation); and

- c. Additional regional rules and orders (and their documentation), relied upon for demonstrating attainment in the DFW area.
- 3. A 2007 Motor Vehicle Emissions Budget (MVEB) for transportation conformity;
- 4. A demonstration of transport from the HGA area supporting an attainment date extension to 2007;
- 5. Emissions growth estimates, and a 2007 forecast emissions inventory; and,
- 6. A commitment to perform a mid-course review with submittal to us by May 1, 2004.

The attainment control strategy; i.e., regulations, initiatives, and orders, are primarily designed to control Nitrogen Oxides (NOx) emissions from various sources, since the modeling shows ozone reduction is more sensitive to NOx controls. For purposes of this action, we are reviewing the modeling, weight-of-evidence support, the transport analysis, the MVEB, forecasted emissions inventory, the mid-course enforceable commitment, and the Transportation Control Measures, the Speed limit reductions and the Voluntary Mobile Emissions Program local initiatives. We are also reviewing the enforceable commitment to perform new mobile source

modeling for the DFW area, using MOBILE6, within 24 months of the model-s release, including a provision stating that if transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, transportation conformity will not be determined until Texas submits a motor vehicle emissions budget which is developed using MOBILE6 and which we find adequate.

C. Photochemical Modeling

What model approach was used for the analysis?

The state used the Comprehensive Air Quality Model with Extensions (CAMx) version 2.01 photochemical grid model to conduct both the SIP attainment demonstration modeling and the downwind transport modeling for the DFW ozone nonattainment area. The State demonstrated that CAMx performed better than UAM version IV, the regulatory model, in the HGA nonattainment area and petitioned us to approve its use in the DFW nonattainment area. We approved the use of CAMx for the DFW ozone nonattainment area based upon the model—s better performance in the HGA nonattainment area. This was considered to be valid for the DFW area. The State—s modeling activities were performed as outlined in a series of the modeling protocols, according to our "Guideline for Regulatory Application of the Urban Airshed Model" (July, 1991)

(Guideline). The final modeling protocol developed by the State was submitted in August 1999. This protocol was reviewed and approved by us. The State used a relatively large modeling domain with nested grids to capture the influence of regional and long-range transport. The modeling domain covers the DFW ozone nonattainment area which is comprised of Dallas, Tarrant, Collin, and Denton Counties. The modeling domain also covers most counties in central and east Texas, including the ozone nonattainment counties of Harris, Jefferson, Orange, Chambers, Hardin, Liberty, Montgomery, Waller, Brazoria, Galveston, and Fort Bend counties. It also covers a number of other States; e.g., Louisiana and Mississippi in the southeastern portion of the country.

How were exceedance days evaluated and what days were modeled?

Our 1991 Guideline sets forth a recommended procedure for selecting ozone exceedance days appropriate for conducting a modeling demonstration. This procedure, in part, considers wind rose analyses based upon the four morning hours of 0700 to 1000 local standard time. These wind rose analyses are used to define the meteorological patterns for source-receptor relationships associated with high ozone events. The State used this method for defining meteorological patterns. The

number of ozone exceedance days for the period, 1990 - 1996, associated with each meteorological pattern was identified. The most prominent meteorological pattern for ozone exceedance days (i.e., 70%) was calm winds; i.e., wind speeds < 3mph. The meteorological pattern with southerly winds was the second most prominent pattern with 25% of the ozone exceedance days.

A total of eleven ozone exceedance days were identified as candidates for modeling. From these, the State chose the candidate episodes in 1995 (calm winds) and 1996 (southerly winds), in part, since they are more applicable to the most currently available emissions inventory (the 1996 Periodic) and since more ambient data is generally available for these episodes.

The State selected June 21 & 22, 1995, which form a multi-day episode, as two of the three primary episode days to model from the calm meteorological regime. These two days also had 1-hour exceedances fairly close to the current ozone design value (i.e., 139 ppb). For the third primary episode day, the State selected July 3, 1996. Although the meteorological pattern on July 3rd had neither calm nor southerly winds, since the two days prior exhibited southerly winds, the rationale for this selection is that July 3rd is associated with southerly winds. It also occurred during the

period of enhanced aerometric monitoring. The high ozone episode days the State selected and modeled meet with the requisite three primary episode days and cover the two predominate types of meteorological patterns associated with high ozone in the DFW area. A more complete description of the episode selections and technical rationales can be found in the TSD.

How was potential transport from the HGA area addressed? The State demonstrated the potential transport of ozone and ozone precursors from the upwind HGA nonattainment area upon the DFW area for both the 1995 and the 1996 episodes. This demonstration was primarily based upon two modeling analyses. The first used the same set of air quality and meteorological inputs as used in the base case simulation, but with an emissions data set in which anthropogenic (man-made) emissions from the 8-county HGA area were eliminated. second was an ozone source apportionment analysis. The CAMx model has an optional feature which tracks the sources of precursors that contribute to the ozone formed at a given location. This feature was used to assess the culpability of sources in the 8-county HGA nonattainment area to the DFW four-county nonattainment area. These analyses show that for July 3, 1996, 2-4 ppb of ozone in portions of the DFW area

comes from HGA sources.

The State also submitted a back trajectory analysis of ozone exceedance days in the DFW area for the six year period, 1993 to 1998. During this period there were 160 exceedance days in the DFW area and approximately ten percent had trajectories going back to the HGA area.

Thus, emissions from the HGA area have the potential to influence DFW=s ability to attain the 1-hour ozone standard. It is EPA=s proposed technical position that for some ozone exceedance days, the DFW area is affected by transport from the HGA area. On other exceedance days, the DFW area is affected only by ozone precursor emissions generated within the DFW area itself.

Based on this transport demonstration, we propose to grant the State-s request for an extension of the attainment date to November 15, 2007. A detailed discussion of the acceptability of the demonstration is in the section on <a href="EPA-section

D. Photochemical Modeling Results

What were the modeling results for the primary episode days and for the future attainment date?

The model simulated ozone concentrations on selected

primary episode days for the 1995 and 1996 episodes using emissions specific for those days, and emissions forecast to a 2007 future year. The resulting DFW area summary of the performance statistics and ozone peaks for 1995, 1996, and 2007 are shown in Table 1. The normalized bias and gross error performance statistics shown in Table 1 are well below our recommended maximum levels. This indicates that the model adequately replicated the spacial and temporal ozone formation that occurred on these ozone exceedance days. This provides an assurance that the model is useful in testing future control measures. These modeled ozone peaks reflect the results of the 2007 forecast emissions and control strategy for the 1995 and 1996 episode days.

Table 1: Summary of Performance Statistics and Peak Observed and Modeled Ozone Concentrations (ppb) in the DFW Ozone Nonattainment Area

Period	Episode Days		
Primary Episode Day	6/21/95	6/22/95	7/3/96
Peak Observed	144	135	144
Peak Modeled Base Case	132.8	137.6	159.2
Peak Modeled 2007 Future Case	121.1	126.1	144.2
Peak Modeled 2007 Post- Control Case	110.3	113.1	131.5
Normalized Bias Greater Than 60 ppb	-10.1%	-8.8%	-3.4%

Normalized Gross Error	12.2%	12.5%	15.0%
Greater Than 60 ppb			

Do the modeling results demonstrate attainment of the ozone standard?

The <u>Guidance on Use of Modeled Results to Demonstrate</u>

Attainment of the Ozone NAAQS, (June, 1996) recommends the use of either a statistical or deterministic approach to demonstrate attainment. Both of these approaches allow for the use of Weight-of-Evidence (WOE) to supplement the modeling results. The State elected to use the deterministic approach with WOE. As noted in Table 1, the 1-hour maximum predicted ozone concentration for the 2007 post-control modeling in the DFW area on the controlling day (July 3, 1996) (131.5 ppb) is above the standard; whereas, the other two episode days modeled are well below the standard.

The 2007 post-control modeling by itself does not conclusively demonstrate attainment of the standard; (i.e., the deterministic test), but its results are so close to attainment to warrant the consideration of WOE analyses that support the demonstration of attainment. The State conducted several WOE analyses (see next section for further details) to provide additional confirmation that the demonstration shows

that DFW will attain the standard by 2007 with the planned emission controls.

E. Weight-Of-Evidence

What WOE analyses and determinations are used to support the modeled attainment demonstration?

As presented in section D, our 1996 guidance document provides for the use of WOE to complement the control strategy modeling in demonstrating attainment. The key concept behind our June 1996 guidance is that determination of attainment, based on monitored ozone concentrations, allows for some exceedances of the 1-hour standard. Thus, even though the model may show some areas with peak concentrations slightly above the NAAQS, such modeled exceedances do not necessarily imply that monitored attainment will not be achieved.

Since the 2007 post-control modeling for the July 3, 1996, episode day is the only day exceeding the standard, most of the WOE analyses address this day. The State submitted the following WOE analyses:

1. <u>Notable higher peak modeled than monitored ozone</u>

<u>concentrations:</u> The monitored peak in the DFW area on

July 3, 1996, was 144 ppb versus a modeled peak of 159

ppb. Thus, there is some uncertainty regarding the

modeled peak, even though the episode satisfied all of

our criteria for model performance.

- 2. Meteorology: As previously indicated, the specific meteorology on July 3, 1996, was not of the types most associated with ozone exceedances in the DFW area. In addition, although the model performance for July 3, 1996, was acceptable, there was an indication that the meteorological features were not fully replicated for this day. There were scattered rain showers in the area which may have presented some meteorological effects which could not be modeled.
- 3. Additional ozone reduction metrics: The State presented additional metrics, aside from the modeled peak. The metrics presented are Area of exceedance, Area-hours of exceedance, and a measure of potential exposure. These metrics measure the geographic extent and temporal duration and duration of the ozone exceedance for various control strategies. The results show that the modeled control strategy produces a significant reduction in each of these additional metrics. This indicates that the selected control strategy should reduce the geographical and temporal aspects of the ozone exceedance, as well as the peak concentration.

4. Estimated future design value: The estimated future design value, as recommended in our draft guidance for assessing attainment of the 8-hour standard, is determined by proportioning the change in the modeled ozone results to a change in the design value.

To estimate the future design value, the State developed a ratio of the 2007 post-control modeling results to that of the original Base modeling results. Since episodes chosen for the DFW attainment demonstration occurred during 1995 and 1996, the State used monitoring data collected from 1995 to 1997 in the DFW area to establish the base design values. Then the ratio of the modeling results is multiplied by the 1995-1997 base design value to obtain an estimated future design value. Using this procedure the estimated future design value for July 3rd is 115.3 ppb, which is less than the standard. This result suggests that it is likely that the area will attain the standard by 2007.

5. <u>Design value trends:</u> The State analyzed historic monitored air quality data in the DFW area for the period of 1981 to 1999. The measure of air quality which determines the nonattainment classification is the design value. The design value is the highest of the fourth-

highest daily peak ozone concentration over a three year period at any monitoring site in the area. There had been a general downtrend in the design value; however, it has remained constant in recent years. The constant trend has occurred despite dramatic increases in the level of construction and economic activity and substantial growth in the mobile fleet. Existing regulations appear to be adequate to keep the design value constant and new regulations included in the SIP should provide a significant decline in the design value.

6. New technologies: The State plans to continue reviewing and implementing new technologies as appropriate for the DFW area. The area will also benefit from our requirements for cleaner vehicles and fuels in the future.

In summary, the State=s WOE analyses provide adequate support for the State=s attainment demonstration. Maintaining air quality through recent periods is demonstrated and future progress in air quality improvement is shown to be likely. Our decision on the adequacy of the WOE is based on the composite of the analyses, and not on any single element. The WOE complements the modeled control strategy and indicates attainment should be reached by November 15, 2007.

The 1996 guidance recognizes a need to perform a midcourse review as a means for addressing uncertainty in the
modeling results. Because of the uncertainty in long term
projections, we believe that a viable attainment demonstration
that relies on weight of evidence should contain provisions
for periodic review of monitoring, emissions, and modeling
data to assess the extent to which refinements to emission
control measures are needed. The State submitted an
enforceable commitment to perform such a mid-course review and
to submit a SIP revision by May 2004.

F. Emission Control Strategy

What emission control strategies were included in the attainment demonstration?

The DFW attainment demonstration SIP is directed at reductions of NOx since the modeling shows reductions of NOx will be most effective in bringing the area into attainment of the Standard.

The attainment demonstration SIP relies on a combination of Federal measures, State measures, CAA statutory requirements, local initiatives applied to different groups of counties in, and adjacent to, the DFW area, and projections of the level of control in the HGA area based on enforceable commitments in the November 1999 SIP for the HGA area. The

attainment demonstration SIP also relies on Regional measures applied in east and central Texas. Please refer to the TSD for more details regarding these measures, initiatives, growth rates and emission reductions.

<u>Federal Measures:</u> The State included the following Federal Measures in the Future Year Base Case.

1. On-road mobile sources:

- Tier 2 vehicle emission standards and federal low sulfur gasoline in DFW and HGA.
- National Low Emitting Vehicles standards.
- Heavy-duty diesel standards.

We believe that the projected growth rates and emissions reductions from the sources subject to the above federal measures were calculated correctly by the State.

2. Off-road mobile sources:

- Lawn and garden equipment standards.
- Tier III heavy-duty diesel standards.
- Locomotive standards.
- Compression ignition standards for vehicles and equipment.
- Spark ignition standards for vehicles and equipment.
- Recreational marine standards.

We believe that the State correctly projected the growth rates

and emissions reductions subject to these federal measures.

<u>CAA Statutory Requirements</u>: The State included the following CAA Statutory Requirements in the Future Year Base Case.

- Phase II reformulated gasoline (RFG) in the DFW four-county nonattainment area and HGA eight-county nonattainment area
- Texas motorists= choice inspection and maintenance (I/M) program in Harris, Dallas and Tarrant Counties

We believe that the State correctly projected the growth rates and emissions reductions from sources subject to these CAA Statutory Requirements.

<u>State Measures:</u> The State included the following State

Measures as local (DFW) area controls in the Future Year Base

Case.

- Electric generating and industrial point sources four county area.
- An expanded vehicle Inspection/Maintenance program nine county area.
- Low emission diesel fuel nine county area.
- Heavy-duty diesel operating restrictions four county area.
- Accelerated purchase of Tier 2/3 non-road compression ignition equipment four county area.

- Airport ground support equipment electrification airports of a certain size in the four county area.
- Gasoline heavy equipment engines nine county area.
- Gas-fired water heaters, small boilers, and process heaters State-wide.

We have already published actions on some of the above control measures in the Federal Register as discussed below. We believe that the State correctly projected the growth rates for and the emissions reductions from these affected sources.

Local Measures:

- 1. Speed limit reductions nine county area.
- 2. Voluntary Mobile Emissions Program nine county area.
- 3. Transportation Control Measures four county area.

 Our proposed action on these three local measures is discussed in more detail later in this section.

Regional measures:

- 1. Agreed orders with Alcoa, Inc. (formerly Aluminum Company of America) for their Milam Facility, and the Eastman Chemical Company, Texas operations, for their facility near Longview, Texas.
- 2. Electric generating facilities and cement plants in central and eastern Texas.

- 3. Low Reid Vapor Pressure Gasoline in eastern and central Texas.
- 4. Stage I gasoline vapor recovery at gas stations in central and eastern Texas.

We have already published actions on the above control measures in the Federal Register, as discussed below.

Action needed on Control Measures

We cannot finalize an action upon the Attainment Demonstration SIP, its MVEB, and the State=s Request for an Extension of the Attainment Date until we have finalized action on the following:

- 1. The revised emission specifications in the DFW area for Electric Utility Boilers, Industrial, Commercial or Institutional Boilers and certain Process Heaters (30 TAC sections 117.104, 117.106, 117.108, 117.116, 117.206 as they relate to the DFW area, and the repeal of sections 117.109 and 117.601 as they relate to the DFW area): Proposed approval October 31, 2000. See 65 FR 64914.
- Vehicle Inspection/Maintenance program (30 TAC 114.2,
 114.50 114.53).
- 3. Low emission diesel fuel (30 TAC 114.6, 114.312 114.317, 114.319).
- 4. Non-Road Large Spark-Ignition (LSI) Engines (30 TAC

- 114.420, 114.421, 114.422, 114.427, and 114.429).

 Accelerated Purchase of Tier2/Tier3 Non-Road CompressionIgnition Equipment (30 TAC 114.410, 114.412, 114.416,
 114.417, and 114.419). Non-Road Construction Equipment
 Restriction (30 TAC 114.432, 114.436, 114.437, and
 114.439). Electrification of Airport Ground Support
 Equipment (GSE) (30 TAC 114.400, 114.402, 114.406, and
 114.409.
- 5. The State-wide NOx rules for Water Heaters, Small Boilers, and Process Heaters (30 TAC sections 117.460, 117.461, 117.463, 117.465, 117.467, 117.469): Direct final approval effective December 25, 2000. See 65 FR 64148.
- 6. The agreed orders with Alcoa, Inc. (formerly Aluminum Company of America) for their Milam Facility, and the Eastman Chemical Company, Texas operations, for their facility near Longview, Texas: Direct final approval effective December 25, 2000. See 65 FR 64148.
- 7. The NOx rules for Electric Generating Facilities and cement plants in East and Central Texas (30 TAC sections 117.131,117.133,117.134,117.135,117.138,117.141,117.143,1 17.117.145,117.147,117.149,117.512,117.260,117.261, 117.265, 117.273,117.279, 117.283, 117.524): Proposed

- approval October 31, 2000. See 65 FR 64914.
- 8. Lower Reid Vapor Pressure Gasoline in eastern and central Texas (30 TAC sections 114.1, 114.301, 114.304 114.307, and 114.309). Proposed approval November 20, 2000. See 65 FR 69720.
- 9. Stage I vapor recovery in eastern and central Texas (30 TAC sections 115.222 114.229): Proposed approval December 20, 2000. See 65 FR 79745.
- 10. VOC rules as RACT for batch processing (30 TAC sections 115.160 115.169) and wastewater (30 TAC sections 115.140 115.149): Proposed approval December 20, 2000. See 65 FR 79745.
- 11. The administrative revisions to the existing Texas NOx SIP (30 TAC sections 117.101 117.121, 117.201 117.223, 117.510, 117.520, and 117.570): Proposed approval October 31, 2000. See 65 FR 64914.
- 12. Texas Clean Fleet Program (30 TAC 114.1, 114.3, 114.150, 114.151, 114.153 114.157, 114.201, 114.202, 114.152).
- 13. The 15% ROP Plan.
- 14. The Post 1996 ROP Plan.
- 15. The revisions to the 1990 base year inventory.
- 16. The speed limit reductions, the VMEP and the TCMs.

17. The finding that major sources of VOCs in the DFW area are meeting RACT.

It should be noted that several of these measures are the subject of ongoing litigation. Should the State lose, and as a result imperil any reductions needed for attainment, and there are no measures which make up the lost reductions, we may have to disapprove the attainment demonstration SIP.

What are the local initiatives and are they approvable?

The State submitted three local initiatives; Speed limit reductions in the nine county area (Dallas, Tarrant, Collin, Denton, Ellis, Johnson, Parker, Rockwall, and Kaufman Counties), a Voluntary Mobile Emissions Program in the nine county area, and Transportation Control Measures in the four county area.

Speed limit reductions

The Texas Department of Transportation (TxDOT) revised regulations relating to speed limits to allow TNRCC to submit a request to change speed limits for environmental reasons when justified. Please see adopted rules, 25 TexReg 5686, June 9, 2000; and proposed rules, 25 TexReg 2018, March 10, 2000). TxDOT, using this authority, will lower all 70 mile per hour (mph) speed

limits to 65 mph, and all 65 mph speed limits to 60 mph in the four county area. These slower speeds are anticipated to reduce the emissions of NOx and improve air quality. We propose approval of the speed limit reductions control measure.

Voluntary Mobile Emissions Program (VMEP) Reductions What is EPA=s VMEP?

Voluntary mobile source strategies that attempt to complement existing regulatory programs through voluntary, non-regulatory changes in local transportation activities or changes in in-use vehicle and engine composition constitute the VMEP. The Clean Air Act allows SIP credit for new approaches to reducing mobile source emissions. This flexible approach is set forth in section 110. Economic incentive provisions are in sections 182 and 108 of the Act. Credits generated through VMEP can be counted toward attainment and maintenance of the NAAQS. Up to 3% of the total future year emissions reductions required to attain the appropriate NAAQS may be claimed under the VMEP policy. What qualifies for SIP credit?

The basic framework for ensuring SIP credit for VMEPs is spelled out in guidance that came out under a

memorandum from Richard D. Wilson, Acting Assistant

Administrator for Air and Radiation, dated October 24,

1997, entitled AGuidance on Incorporating Voluntary Mobile

Source Emission Reduction Programs in State

Implementation Plans (SIPs).@ Generally, to obtain

credit for a VMEP, a State submits a SIP that:

- 1) identifies and describes a VMEP;
- 2) contains projections of emission reductions attributable to the program, along with any relevant technical support documentation;
- 3) commits to evaluation and reporting on program implementation and results; and
- 4) commits to the timely remedy of any credit shortfall should the VMEP not achieve the anticipated emission reductions.

More specifically, the guidance suggests the following key points be considered for approval of credits. The credits should be quantifiable, surplus, enforceable, permanent, and adequately supported.

In addition, VMEPs must be consistent with attainment of the standard and with the Rate of Progress requirements and not interfere with other Clean Air Act requirements.

What did the State submit?

The State submitted program descriptions that projected emission reductions attributable to each specific program as part of the DFW attainment demonstration submitted April 25, 2000. The State commits to evaluating each program to validate estimated credits. Table 2 lists the programs and projected credits. Programs submitted with no credit assigned are listed in Table 3.

Table 2. Voluntary Mobile Emission Reduction Programs and Credits Claimed

Program Type	VOC Benefits (tons per day)	NOx Benefits (tons per day)
Alternative Fuel Program	0.18	0.18
Employee Trip Reduction	0.29	0.53
Public Education Campaign/Ozone Season Fare Reduction	0.08	0.15
Tier II Locomotive Engines	0 to 0.6	0 to 3.0
Vehicle retirement Program/Vehicle Maintenance*	0.56	0.77
Total Benefits (tpd)	1.11 to 1.71	1.63 to 4.63

^{*} Emission benefits quantified for the Vehicle Retirement Program only. Emission benefits for Vehicle Maintenance are credited in the Vehicle Inspection and Maintenance Program

Table 3. Voluntary Emission Reduction Programs with No Credit Assigned

Sustainable Development

Non-Road Ozone Season Reductions

Off-Road Heavy Duty Diesel Engine Retrofits

The State=s goal is 5.0 tons per day of NOx benefit from the VMEP program. This is within the 3% criteria in our guidance. The State has committed to evaluating and reporting on the program implementation and results and to timely remedy of any credit shortfall.

The State also committed to additional Transportation

Control Measures that can be substituted for any shortfall in

credit from the estimated credits for VMEP. These include

Signal Improvements and Freeway Corridor Management.

Do the VMEPs meet the requirements for approval?

A detailed analysis of all the VMEP measures can be found in the TSD for this document. For each creditable VMEP, the measure was found to be quantifiable. The reductions are surplus by not being substitutes for mandatory, required emission reductions. The measures will be enforced by the State. The reductions will continue at least for as long as the time period in which they are used by this SIP demonstration, so they are considered permanent. Each measure is adequately supported by personnel and program resources for

implementation.

What action is EPA taking on the VMEP?

The DFW Attainment SIP VMEP meets the criteria for credit in the SIP. The State has shown that the credits are quantifiable, surplus, enforceable, permanent, adequately supported, and consistent with the SIP and the Act. We propose to approve the VMEP portion of the Texas SIP.

Transportation Control Measures (TCMs)

The State has included a variety of TCMs in the SIP as a control strategy for attainment of the ozone NAAQS. The specific TCMs have been described in detail in Appendix G of the SIP and will be incorporated by reference in the Code of Federal Regulations in the final approval action. Detailed information is necessary for those TCMs used as emissions reduction measures in the SIP to ensure that they are specific and enforceable as required by the Act and reflected in our policy. The TCMs= description in the SIP includes identification of each project, location, length of each project (if applicable), a brief project description, implementation date, and emissions reductions for both VOC and NOx.

The TCMs identified through this process and included in the SIP are contained and funded in the metropolitan transportation plan (MTP) and transportation improvement program (TIP) to ensure funding for implementation.

We propose approval of the transportation control measures.

What are the projected NOx reductions from the

Federal and State control measures and local initiatives?

Table 4 provides the projected NOx reductions for the

2007 attainment year resulting from the Federal and State

rules, and the local initiatives.

Table 4: NOx Reduction Estimates (tons per day)

Federal Measures	Reduction
On-road mobile	93.00
Off-road mobile	48.00
Total Federal Measures	141.00
State Measures	
Major point sources	129.00
Inspection/Maintenance	54.45
Low emission diesel fuel	3.48
HD diesel oper. restrictn	2.50
(est)	
Acc purchase Tier II/III	13.80
spark	
Airport GSE	9.54
Heavy equipment gas engines	1.80
Gas-fired water heaters, etc	0.50
Total State measures	215.07

Local Initiatives	
Speed limit reduction VMEP (2.4 tpd - 5.4 tpd)	5.42 5.00
TCMs	4.73
Total Local Initiatives	15.15
TOTAL NOX REDUCTIONS	371.22

G. Motor Vehicle Emissions Budget

What is a Motor Vehicle Emissions Budget (MVEB) and why is it important?

The MVEB is the level of total allowable on-road emissions established by a control strategy implementation plan or maintenance plan. In this case, the MVEB establishes the maximum level of on-road emissions that can be produced in 2007, when considered with emissions from all other sources, which demonstrate attainment of the NAAQS. It is important because the MVEB is used to determine the conformity of transportation plans and programs to the SIP, as described by section 176(c)(2)(A) of the Act.

What are the MVEBs established by this plan and proposed for approval by this action?

The MVEBs established by this plan and that the EPA is proposing to approve are contained in Table 5.

Table 5: 2007 Attainment Year Motor Vehicle Emissions Budgets

(tons per day)

Pollutant	2007
VOC	107.60
NOx	164.30

What is the State=s commitment to revise the Motor Vehicle
Emissions Budgets with MOBILE6?

All States whose attainment demonstration includes the effects of the Tier 2/sulfur program have committed to revise and resubmit their motor vehicle emissions budgets after we release MOBILE6. The State has begun its public comment process on an enforceable commitment and has committed to performing new mobile source modeling for the DFW area, using MOBILE6, within 24 months of the model=s release. The public hearing is scheduled for January 4, 2001. In addition, the enforceable commitment includes a provision stating that if a transportation conformity analysis is to be performed between 12 months and 24 months after the release of MOBILE6, transportation conformity will not be determined until the State submits an MVEB which is developed using MOBILE6 and which we find adequate. The North Central Texas Council of Governments and the Department of Transportation have been informed of the commitment.

After adoption by the Commissioners, the Governor of

Texas must submit the enforceable commitment to us. If the State fails to meet its commitment to submit revised budgets using MOBILE6, we could make a finding of failure to implement the SIP, which would start a sanctions clock under section 179 of the Act.

What is the Applicable Budget to use for Conformity Analysis?

The proposed approval of the MVEB in Table 5 would be effective for conformity purposes only until revised motor vehicle emissions budgets are submitted and we have found them adequate. In other words, the budgets that are part of this attainment demonstration will apply for conformity purposes only until there are new, adequate budgets consistent with the States commitments to revise the budgets. The revised budgets will apply for conformity purposes as soon as we find them adequate.

We are proposing to limit the duration of our approval in this manner because we are only proposing to approve the attainment demonstrations and their budgets because the States have committed to revise them after we release MOBILE6 and after the State conducts its mid-course review. Therefore, once we have confirmed that the revised budgets are adequate, they will be more appropriate than the budgets we are

proposing to approve for conformity purposes now.

If the budgets we propose to approve raise issues about the sufficiency of the attainment demonstration, we will work with the State. If the revised budgets show that motor vehicle emissions are lower than the budgets we approve, a reassessment of the attainment demonstration—s analysis will be necessary.

This action does not propose any change to the existing transportation conformity rule or to the way it is normally implemented with respect to other submitted and approved SIPs, which do not contain commitments to revise the budget.

H. EPA=s Analysis

Did the State adequately document the techniques and data used to derive the modeling input data and modeling results?

Yes, the submittal from the State thoroughly documented the techniques and data used to derive the modeling input data. The submittal adequately summarized the modeling outputs and the conclusions drawn from these model outputs. The submittal adequately documented the States weight-of-evidence determinations and the bases for concluding that these determinations support the attainment demonstration.

Did the modeling procedures and input data used comply with the Environmental Protection Agency guidelines and Clean

Air Act requirements?

Yes, the modeling procedures and input data (including the emissions inventory inputs and procedures) meet the requirements of the Act and are consistent with our July 1991 and June 1996 ozone modeling guidelines.

Does the emission control strategy meet the requirements of the Clean Air Act?

Yes, the selected emission control strategy, based upon modeling and the WOE techniques, plus additional information regarding the effect of HGA upon DFW, demonstrates attainment of the 1-hour ozone standard in DFW.

Does the Weight-of-Evidence support the attainment demonstration?

Yes, the submittal adequately documented the State=S WOE determinations and the bases for concluding that these determinations adequately complement the attainment demonstration.

The WOE, when viewed in aggregate with the modeling, shows attainment of the standard and thus we are proposing approval.

Has the State adopted the selected emission control strategy and has the State adopted the emission control regulations needed to implement the emission control

strategies?

Yes, the State has adopted and submitted the emission control strategies and all associated emission control regulations, orders, and the TCMS, Speed Limit Reductions, and the VMEP initiatives.

Has the State adopted all local measures required by the Clean Air Act for the areas current ozone classification?

Yes, the State has adopted all VOC and NOx emission control requirements required under the Clean Air Act (Act) for a serious ozone nonattainment area. Please see the TSD for a listing of requirements and the dates they were satisfied.

It is our position that the State of Texas has met the 1998 Transport Policy=s criteria for adoption and submittal to EPA for approval of all measures required under the Act for an area classified as serious.

Has the State implemented all reasonably available control measures?

Yes. Section 172(c)(1) of the Act requires SIPs to provide for the implementation of all reasonably available control measures (RACM) as expeditiously as practicable and for attainment of the standard. We have previously provided guidance interpreting the RACM requirements of 172(c)(1) in

the General Preamble. See 57 FR 13498, 13560 (April 16, 1992). In the General Preamble, we indicated our interpretation of section 172(c)(1), under the 1990 amendments, as imposing a duty on States to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the particular nonattainment area. We also retained our pre-1990 interpretation of the RACM provisions that where measures that might in fact be available for implementation in the nonattainment area could not be implemented on a schedule that would advance the date for attainment in the area, we would not consider it reasonable to require implementation of such measures. We indicated that States could reject certain RACM measures as not reasonably available for various reasons related to local conditions. A State could include area-specific reasons for rejecting a measure as RACM, such as the rejected measure would not advance the attainment date, or technological and economic feasibility in the area.

We also issued a recent memorandum reaffirming our position on this topic, AGuidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.@

John S. Seitz, Director, Office of Air Quality Planning and

Standards, dated November 30, 1999. A copy can be obtained from www.epa.gov/ttn/oarpg/tlpgm.html. In this memorandum, we state that in order to determine whether a state has adopted all RACM necessary for attainment and as expeditiously as practicable, the state will need to provide a justification as to why measures within the arena of potential reasonable measures have not been adopted. The justification would need to support that a measure was not reasonably available for that area and could be based on technological or economic grounds.

We reviewed additional potential available measures, as documented in the RACM analysis in the TSD (Appendix C) for this proposed rulemaking. Our analysis showed that the State is already controlling the significant major point sources and area sources to RACM levels and the SIP contains the transportation control measures reviewed nationally, as well as a motor vehicle Inspection and Maintenance program. Based on this analysis, we propose to conclude that any remaining evaluated measures are not reasonably available for the specific DFW area, because (a) some would require an intensive and costly effort for numerous small area sources or transportation control measures, and (b) since the DFW area relies in part on reductions from the upwind HGA area which

are substantial, and the reductions projected to be achieved by the evaluated additional set of measures are relatively small, they would not produce emission reductions sufficient to advance the attainment date in the DFW area and, therefore, should not be considered RACM.

Although we encourage areas to implement available RACM measures as potentially cost effective methods to achieve emissions reductions in the short term, we do not believe that section 172(c)(1) requires implementation of potential RACM measures that either require costly implementation efforts or produce relatively small emissions reductions that will not be sufficient to allow the DFW area to achieve attainment in advance of full implementation of all other required measures.

Has the State established an acceptable MVEB?

The MVEB budget submitted by the State for the DFW area is adequate and is consistent with all pertinent SIP requirements, and the MVEB is proposed for approval.

Does the DFW area meet the RACT requirements for major source VOC emissions?

On March 7, 1995, as part of our action approving VOC requirements, we found that the State had implemented RACT on all major sources in the DFW area except those that were to be covered by post-enactment Control Technique Guidelines

(CTG=s)(44 FR 12438). Since that time many expected CTGs were issued as Alternative Control Technique documents - ACTs. Of the expected CTGs and ACT=s, DFW had major sources in the following categories; batch processing, reactors and distillation, wood furniture and aerospace coating. We have approved measures for all of these categories as meeting RACT. (See the TSD for this action for dates.)

With regard to Aerospace coatings, we have approved Alternate RACT determinations for the major sources in the DFW area: Lockheed-Martin, Bell Helicopter Textron, and Raytheon Texas Instruments Systems, Inc. January 20, 1994 (See 59 FR 02532), May 30,1997 (See 62 FR 29297), and February 9, 1998 (See 63 FR 6491), respectively. With these Alternative RACT determinations, we concluded that RACT was in place for these Aerospace coating sources. On March 27, 1998, we published the National Emission Standards for Hazardous Air Pollutants (NESHAP) final rule and the Control Technique Guideline for Aerospace Manufacturing and Rework facilities. (see 63 FR 15006). The State submitted revisions to its coating rules on July 13, 2000 to ensure the control requirements for Aerospace companies remained consistent with the NESHAP rule. At the same time, the State requested that these replace the Alternative-RACT plans as a part of the Texas SIP.

revised 2000 aerospace rules provide provisions that are more consistent with the new MACT standards and we anticipate that we will propose approval of these provisions. In the mean time, we believe the previously approved alternative RACT plans continue to meet the RACT requirements for these three sources.

Also, with the reclassification of the DFW area to serious, the major source size was decreased to 50 tons per year. This necessitated that the State revise its rules for bakeries and adopt rules for the large offset lithographers category. We have approved the rule revisions for bakeries and the new rules for offset lithographers as meeting the RACT requirements. (See TSD for dates and cites).

Thus, it is our position that RACT is in place for all major sources of VOCs in the DFW area.

Was the demonstration of transport from the HGA area acceptable to support the Request for Extension of the Attainment Date?

The policy for the extension of an ozone attainment date is discussed in the BACKGROUND section of this notice. The State=s compliance with these requirements is discussed here.

a. <u>Identification of the area as a downwind area</u> affected by ozone transport.

We have reviewed the photochemical modeling demonstrations, and are proposing to agree with the State that the July 3, 1996, episode adequately demonstrates transport of pollutants from the HGA area. We are proposing that this transported pollution affects DFW=s ability to attain by the current attainment date. Thus, the DFW and HGA areas are inextricably linked. Without controls in the HGA area, the DFW area=s ability to attain is jeopardized. We, therefore, propose to find that the State=s demonstration of ozone transport meets the criteria in our attainment date extension policy.

b. Submittal of an approvable attainment demonstration.

EPA=s review of the attainment demonstration SIP shows that it should be approved. The State has modeled and adopted an acceptable control strategy that demonstrates attainment. We are proposing to approve the attainment demonstration SIP, and to agree that it meets the criteria in the July 1998 transport policy and all other EPA guidance and the regulatory and statutory requirements.

c. Adoption of all applicable local measures required under the area's current ozone classification.

Texas has adopted all VOC and NOx related emission control requirements required by the Act for a serious ozone

nonattainment area. A listing of applicable CAA serious classification-related VOC and NOx related regulations and their state-adopted dates for the DFW area, is provided in the TSD to this rulemaking.

It is our position that the State of Texas has met the 1998 Transport Policy=s criteria for adoption and submittal of all measures required under the Act for an area classified as serious. We must finalize approval actions upon the remaining serious area requirements **B** the 15% ROP Plan, the Post-96 ROP Plan, the I/M SIP, and the Clean-fuel Vehicle SIP, before we can make a final finding that the DFW area is meeting all of its classification=s statutory requirements, however.

d. <u>Implementation of all adopted measures by the time</u> upwind controls are expected.

All of the NOx and VOC rules will be implemented as expeditiously as practicable, but no later than 2005, two years before the HGA attainment date of November 15, 2007.

We are proposing to find that this transport policy criteria has been met by the State. We are of the opinion that the phase-in compliance dates are as expeditious as practicable compared with the compliance dates of similar sources in serious ozone nonattainment areas of the country.

II. POST 1996 RATE OF PROGRESS PLAN

A. Proposed Action

What action are we taking?

We are proposing approval of the Post 1996 Rate of Progress (ROP) plan (9% plan), submitted by the Governor on October 25, 1999, which is designed to reduce ozone forming emissions from the baseline emissions by 9% in the DFW nonattainment area for the years 1997-1999. This plan meets the Reasonable Further Progress requirements of the Act (section 182(c)(2)). In addition, we are proposing to approve the MVEBs associated with the 9% plan. We are also proposing to approve the changes to the 1990 base year emissions inventory for the DFW area. The SIP was submitted October 25, 1999, and found complete January 6, 2000.

B. Calculation of Requirements

How do we calculate the needed VOC emissions reductions?

Calculating the needed emission reductions is a multistep process as described below.

Emissions Inventory:

The 1990 Final Base Year Inventory is the starting point for calculating the reductions necessary to meet the requirements of the 1990 Act. The 1990 Final Base Year Inventory includes all area, point, non-road mobile, and on-

road mobile source emissions in the four county DFW ozone nonattainment area. The 1990 base year inventory was originally approved November 8, 1994 (59 FR 55586). The State revised the VOC inventory on August 8, 1996. These changes were approved November 10, 1998 (63 FR 62943). revised the 1990 base year VOC inventory again with the October 25, 1999, SIP revision. The October 25, 1999, SIP revision also contained the State=s first revisions to the 1990 base year NOx emissions inventory. The changes resulted from data gathered for the 1993 and 1996 periodic inventories. Analysis of the changes in the periodic inventories was backcast to the 1990 inventory for consistency since the 1990 inventory remains the ROP beginning point. We have reviewed the inventory revisions and they have been developed in accordance with our guidance on emission inventory preparation. Thus, we are proposing approval of the October 25, 1999, revisions to the 1990 base year inventory. revised 1990 base year inventory is summarized in Table 6. For more detail on how emissions inventories were estimated, see Appendix H in the TSD for this action.

TABLE 6: 1990 Rate-of-Progress Base Year emissions Inventory (tons per day)

	Base	Year	Inv	ventory	
Source	Type			VOC	NOx

Base Year Inventory		
Point	63.98	71.76
Area	174.02	19.99
On-road Mobile	306.60	293.03
Non-road Mobile	105.19	166.05
Total	649.79	550.83

Adjusted Base Year Inventory:

Section 182(b)(2)(C) explains that the baseline from which emission reductions are calculated should be determined as outlined in section 182(b)(1)(B) for 15% ROP plans. This requires that the baseline exclude emission reductions due to Federal Motor Vehicle Control Programs (FMVCP) promulgated by the Administrator by January 1, 1990, and emission reductions due to the regulation of Reid Vapor Pressure promulgated by the Administrator prior to the enactment of the Clean Air Act Amendments of 1990. These measures are not creditable to the Rate of Progress Plans.

Growth Estimates:

States need to provide sufficient control measures in their ROP plans to offset any emissions growth. To do this the State must estimate the amount of growth that will occur. The State uses population and economic forecasts to estimate how emissions will change in the future. Generally, the State

followed our standard guidelines in estimating the growth in emissions. For the projection of NOx emissions from industrial sources, the State used data collected during the development of the 1996 periodic emissions inventory. With the 1996 periodic inventory, Texas surveyed industry to determine why emissions were changing, to determine if changes were actual changes in emissions to the atmosphere, or just changes in the emission estimation methodology. For example, many sources installed continuous emission monitors between 1990 and 1996, and actual measurements replaced engineering estimates. For more detail on how emissions growth was estimated, see Appendix H in the TSD for this action.

Calculation of Target Level:

Table 7 shows how the emissions inventory, adjusted inventories and growth estimates are used to calculate the target levels of emissions and needed emission reductions.

Table 7: Calculation of Required VOC Reductions (tons per day)

1990 Emission Inventory	649.79
1990 Adjusted Relative to 1996	547.54
1990 Adjusted Relative to 1999	535.78
RVP and Fleet	11.76

Turnover 9% of 1990 Adjusted Relative to 1999	48.22
1996 Target level	465.52
1999 Target level	405.54
1999 Projection	575.28
Total Reductions required by 1999	169.74
Reductions required by 15%	139.98
Additional Reductions Required	29.76

How are those emission reductions achieved?

Table 8 documents how the VOC emission reductions for this 9% plan are to be achieved. The following control measures are used: Aircraft Engines, Transportation Control Measures (TCMs), Windshield washer fluid, Utility Engines 1997 - 1999, Underground Storage Tank Remediation, vehicle Tier 1, vehicle Inspection/Maintenance, and RFG.

The State also revised its estimates of on-road motor vehicle emissions based on vehicle registration data updated

to 1998. We are proposing to find them acceptable.

The State included a variety of TCMs in the SIP as a control strategy for attainment of the ozone NAAQS. The specific TCMs are described in detail in Appendix G of the SIP and will be incorporated by reference in Code of Federal Regulations in the final approval action. Please refer to the detailed discussion of TCM requirements under Transportation Control Measures in the Emission Control Strategy sub-section (sub-section I.E) of this action.

The TCMs identified through this process and included in the SIP are contained and funded in the metropolitan transportation plan (MTP) and transportation improvement program (TIP) to ensure funding for implementation.

Please refer to the TSD for details of our analysis of the control measures and our basis for proposing to find the projected emission reductions from these measures acceptable.

Table 8: Summary of VOC Emission Reductions (tons per day)

Required Reduction	29.76
Creditable Reductions	
Aircraft Engines	1.52
TCMs	3.74
Windshield washer fluid	0.29
1998 vehicle registration	3.57

Utility Engine 1997-1999	2.37
UST remediation	1.81
Tier 1, I/M, RFG	16.82
Total	30.12

Does the plan achieve the goal of a 9% reduction in VOCs from the baseline for 1997 to 1999?

Yes. Since the required reductions are 29.76 tons per day and the creditable reductions are 30.12 tons per day, the plan has excess reductions of 0.36 tons per day and achieves the goal; therefore, we are proposing approval of the Post 1996 ROP Plan.

Did the State submit additional reductions?

Yes. The State also submitted NOx reductions. The State=s basic NOx RACT rules were approved September 1, 2000. See 65 FR 53172. We are accepting the State=s NOx reductions as creditable reductions.

Table 9: Summary of NOx Emission Reductions (tons per day)

Required Reduction	0.00
<u>Creditable Reductions</u>	
NOx RACT RFG, I/M, FMVCP Tier I Off-road heavy duty diesel	10.45 56.25 11.98
Total	78.68

C. Motor Vehicle Emissions Budget

What are the MVEBs established by this plan and approved by this action?

The MVEBs established by this plan and that we are proposing to approve are contained in Table 10. The MVEBs have been found to meet the adequacy criteria and upon further review of the SIP for approvability continue to be consistent with ROP.

Table 10: 1999 9% ROP SIP Motor Vehicle Emissions Budgets (tons per day)

Pollutant	1999
VOC	147.22
NOx	284.14

III. 15% RATE OF PROGRESS PLAN

A. Proposed Action

What action are we taking?

We are proposing full approval of the 15% plan submitted on August 8, 1996, contingent upon us finalizing approval of the States I/M program for the DFW area. The 15% plan was given conditional, interim approval on November 10, 1998, pending corrections to the DFW I/M program. It was given

conditional, interim approval because it relied on emissions reductions from the I/M program that received conditional, interim approval. For further information on the I/M conditional, interim approval, see 62 FR 37138, published on July 11, 1997. We found that the State had met the conditions of the conditional approval. On April 23, 1999, we removed the conditions and granted Texas a final interim approval.

See, 64 FR 19910. The interim approval expired on February 11, 1999. Texas has submitted significant revisions to the I/M program for the DFW area. The revisions expand the program from the 2 core nonattainment counties to the 4 counties in the nonattainment area plus 5 additional counties.

We are taking a separate action on these I/M revisions.

Because the revisions appear to have eliminated the last impediment to full approval of the I/M program for the DFW area, we are proposing full approval of the DFW 15% plan. This proposed full approval of the DFW 15% plan will not be finalized until action on the I/M program is complete. If the I/M program is disapproved, a different action on the 15% plan will have to be taken. See 63 FR 62943 and the 15% plan TSD for additional information on the DFW 15% plan.

How did the Inspection/Maintenance program submitted with the attainment demonstration purport to cure the previous

deficiencies?

As stated previously, an interim conditional approval for the Motorist Choice Program was proposed on October 3, 1996 (61 FR 51651). An interim final conditional approval was published on July 11, 1997 (62 FR 37138). The conditions were removed from the interim approval on April 23, 1999 (64 FR 19910). The interim approval status of this program lapsed on February 11, 1999.

The State submitted an approvable 18-month demonstration on February 8, 1999, as required by the National Highway System Designation Act of 1995, Public Law 104-59, section 348(c)(1). The program was not fully approved at that time because one provision of the interim approval remained: that the State provide evidence that the remote sensing program was effective in identifying the shortfall in number of vehicles needed to make up for the lack of a tailpipe testing program in all the nonattainment counties. This evidence has yet to be submitted.

Modeling has since shown that NOx reductions are essential to reaching attainment in the DFW area. As a result, the Texas Motorist Choice I/M program has been revised to include measurement for NOx emissions and to provide additional NOx emission reductions by expanding coverage of

the program to all four counties within the DFW nonattainment area (Dallas, Tarrant, Collin and Denton) and selected attainment counties in the DFW consolidated metropolitan statistical area (Ellis, Johnson, Parker, Rockwall, and Kaufman). By revising the program to expand area coverage for NOx SIP credits, the deficiency that prohibited full approval in DFW appears to be cured. All DFW nonattainment counties will be participating in the full program. As indicated above, we have not taken a final action on the I/M submittal. We will be seeking comment on the I/M program in a separate action.

IV. BACKGROUND

A. The Relevant Clean Air Act Requirements

The Act requires us to establish National Ambient Air Quality Standards (NAAQS) for certain widespread pollutants that cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare (Clean Air Act sections 108 and 109). In 1979, we promulgated the 1-hour ground-level ozone standard of 0.12 parts per million (ppm) (120 parts per billion (ppb)). 44 FR 8202 (February 8, 1979).

Ground-level ozone is not emitted directly by sources.

Rather, Volatile Organic Compounds (VOC) and Nitrogen Oxides

(NOx), emitted by a wide variety of sources, react in the presence of sunlight to form ground-level ozone. NOx and VOC are referred to as precursors of ozone.

Ozone formation is accelerated or enhanced under certain meteorological conditions, such as high temperatures and low wind speeds. Higher ozone concentrations occur downwind of areas with relatively high VOC and NOx concentrations or in areas subject to relatively high background ozone and ozone precursor concentrations (ozone and ozone precursors entering an area as the result of transport from upwind source areas).

VOC emissions are produced by a wide variety of sources, including stationary and mobile sources. Significant stationary sources of VOC include industrial solvent usage, various coating operations, industrial and utility combustion units, petroleum and oil storage and marketing operations, chemical manufacturing operations, personal solvent usage, etc. Significant mobile sources of VOC include on-road vehicle usage and off-road vehicle and engine usage, such as farm machinery, aircraft, locomotives, and motorized lawn care and garden implements.

NOx emissions are produced primarily through combustion processes, including industrial and utility boiler use, process heaters and furnaces, and on-road and off-road mobile

sources.

An area exceeds the 1-hour ozone standard each time an ambient air quality monitor records a 1-hour average ozone concentration above 124 ppb in any given day (only the highest 1-hour ozone concentration at the monitor during any 24 hour day is considered when determining the number of exceedance days at the monitor). An area violates the ozone standard if, over a consecutive 3-year period, more than 3 days of exceedances are expected to occur at any monitor in the area.

40 CFR Part 50, App. H.

The highest of the fourth-highest daily peak ozone concentrations over the 3 year period at any monitoring site in the area is called the ozone design value for the area. The Act, as amended in 1990, required EPA to designate as nonattainment any area that was violating the 1-hour ozone standard, generally based on air quality monitoring data from the 1987 through 1989 period. Clean Air Act section 107(d)(4); 56 FR 56694 (November 6, 1991). The Act further classified these areas, based on the areas' ozone design values, as marginal, moderate, serious, severe, or extreme.

The control requirements and date by which attainment is to be achieved vary with an area's classification. Marginal areas were subject to the fewest mandated control requirements

and had the earliest attainment date, November 15, 1993. Severe and extreme areas are subject to more stringent planning requirements but are provided more time to attain the Moderate areas were required to attain the 1-hour standard by November 15, 1996. Serious areas were required to attain by November 15, 1999, and severe areas are required to attain by November 15, 2005 or November 15, 2007, depending on the areas' ozone design values for 1987 through 1989. The DFW ozone nonattainment area was initially classified as Amoderate@ (56 FR 56694) with an attainment date of November 15, 1996. Since the area did not attain the standard by November 15, 1996, we reclassified the area to Aserious@ on March 20,1998 (63 FR 8128). The statutory attainment date for a serious area is November 15, 1999. The DFW ozone nonattainment area contains Dallas, Tarrant, Collin, and Denton Counties (40 CFR Parts 81.314 and 81.326).

The specific requirements of the Act for serious ozone nonattainment areas are found in part D, section 182(c) of the Act. Section 172 in part D provides the general requirements for nonattainment plans. Section 172(c)(6) and section 110 require SIPs to include enforceable emission limitations, and such other control measures, means or techniques as well as schedules and timetables for compliance, as may be necessary

to provide for attainment by the applicable attainment date. Section 172(c)(1) requires the implementation of all reasonably available control measures as expeditiously as practicable and requires the SIP to provide for attainment of the NAAQS. Section 182(b)(1)(A) requires the SIP to provide for a 15% Rate of Progress Plan and also provide for specific annual reductions in emissions of VOC and NOx Aas necessary to attain@ the ozone NAAQS by the applicable attainment date. Our AGeneral Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (57 FR 13498 dated April 16, 1992) provides the interpretive basis for EPA=s rulemakings under the nonattainment plan provisions of the Act (General Preamble). Section 182(c)(2)(A) requires that a serious area use photochemical grid modeling or any other methods judged by us to be at least as effective, to demonstrate attainment of the ozone NAAQS by the applicable attainment date. In the General Preamble, we provide that this requirement for demonstrating attainment may be met by the use of EPA-approved modeling techniques.

Section 182(c)(2)(B) of the Act requires each serious and above ozone nonattainment area to submit a SIP revision by November 15, 1994, which describes, in part, how the area will achieve an actual volatile organic compound (VOC) (and NOx if

required) emission reduction from the baseline emissions of at least 3 percent of baseline emissions per year averaged over each consecutive 3-year period beginning 6 years after enactment (i.e., November 15, 1996) until the areas attainment date. The plan providing for the reduction between November 1996 and November 1999 is referred to as the 9% Plan, the Post-1996 ROP Plan. As part of todays proposal, we are proposing action on the 15% ROP Plan, the 9% ROP Plan, and the attainment demonstration SIP revision submitted by the State of Texas for the DFW serious ozone nonattainment area.

B. Dates of State=s SIP Submissions

As a result of the reclassification to serious, the State was required to submit both an attainment demonstration SIP with an attainment date of November 15, 1999; and a Rate of Progress SIP covering the years from November 15, 1996 to November 15, 1999. The State submitted those SIPs on March 19, 1999. The State had previously submitted the moderate area 15% ROP plan on August 8, 1996, before the area was reclassified to serious. The 15% plan was given conditional, interim approval.

Our review showed that the attainment demonstration SIP submitted in 1999 did not contain a control strategy or adopted measures to implement the strategy and the 1999 Post-

1996 ROP SIP did not achieve the required 9% reduction in emissions for the time period. Therefore, we found both SIPs incomplete and started sanctions and Federal Implementation plan (FIP) clocks effective May 13, 1999.

A new Post-1996 ROP SIP was submitted October 25, 1999, and was found complete on December 16, 1999, since the new plan contained additional VOC reductions to meet the 9% requirement. The new attainment demonstration SIP was submitted April 25, 2000, and was found complete on June 23, 2000, because it contained a modeled control strategy and adopted regulations to implement the strategy. These two completeness findings stopped the sanctions clocks. The FIP clock continues to run unless and until we approve the 9% ROP Plan and the Attainment Demonstration SIP. Section 110(c)(1)(A) requires EPA to promulgate a FIP for the DFW nonattainment area by May 14, 2001 if we have not approved the SIPs by that time.

C. General Requirements for an Attainment Demonstration and its Motor Vehicle Emissions Budgets

In general, an attainment demonstration SIP includes a modeling analysis showing how an area will achieve the standard by its attainment date and the emission control measures necessary to achieve attainment. The attainment

demonstration SIP must include MVEBs for transportation conformity purposes. Transportation conformity is a process required by Section 176(c) of the Act for ensuring that the effects of emissions from all on-road sources are consistent with attainment of the standard. Ozone attainment demonstrations must include the estimates of motor vehicle VOC and NOx emissions that are consistent with attainment, which then act as a budget or ceiling for the purposes of determining whether transportation plans, programs, and projects conform to the attainment SIP.

D. Ozone transport policy and attainment date extensions

The DFW area is classified as serious and, therefore, was required to attain the 1-hour ozone standard by November 15, 1999. The State of Texas, in submitting the April 2000 attainment demonstration SIP, requests an extension of the attainment date to November 15, 2007, based on our July 1998 transport policy.

In developing the attainment demonstration for DFW, the State makes the case that the 1998 Transport Policy is particularly relevant to DFW, which is downwind of the HGA area, and that the DFW area is affected by transport from HGA. If we approve of such a determination for DFW, the area would have until no later than November 15, 2007, the

attainment date for HGA, to attain the 1-hour ozone standard.

In the DFW ozone attainment demonstration SIP reviewed here, the State also relies, in part, on regional and statewide NOx emission reductions in Texas, including the upwind HGA area and eastern and central Texas. The SIP also relies on NOx reductions from the NOx SIP Call States where appropriate.

Attainment Demonstration SIPs were originally due November 1994. However, through a series of policy memoranda, we recognized that States had not submitted these attainment demonstrations and were constrained to do so until ozone transport had been further analyzed. One of the policy memoranda addressing the issue of ozone transport is the transport policy issued by us July 16, 1998, entitled "Extension of Attainment Dates for Downwind Transport Areas". That memorandum included our interpretation of the Act regarding the extension of attainment dates for ozone nonattainment areas that have been classified as moderate or serious for the 1-hour ozone standard and which are downwind of areas that have interfered with their ability to demonstrate attainment of the ozone standard by dates prescribed in the Act. That memorandum stated that we will consider extending the attainment date for an area or a State

that:

- (1) has been identified as a downwind area affected by transport from either an upwind area in the same State with a later attainment date or an upwind area in another State that significantly contributes to downwind ozone nonattainment;
- (2) has submitted an approvable attainment demonstration with any necessary, adopted local measures and with an attainment date that shows it will attain the 1-hour standard no later than the date that the emission reductions are expected from upwind areas under the final NOx SIP call and/or the statutory attainment date for upwind nonattainment areas, i.e., assuming the boundary conditions reflecting those upwind emission reductions;
- (3) has adopted all applicable local measures required under the area's current ozone classification and any additional emission control measures demonstrated to be necessary to achieve attainment, assuming the emission reductions occur as required in the upwind areas; and
- (4) has provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved.

Once an area receives an extension of its attainment date

based on ozone/precursor transport impacts, the area would no longer be subject to reclassification to a higher ozone nonattainment classification based on its original attainment date. If the DFW area is granted an attainment date extension, it would no longer be subject to a reclassification to severe nonattainment for ozone and no longer subject to the additional emission control requirements that would result from the reclassification to severe nonattainment based on a failure to attain by its original attainment date.

Texas has requested an extension of the attainment date for the DFW nonattainment area in conjunction with the ozone attainment demonstration submittals. The ozone attainment demonstration SIP uses November 15, 2007 as the ozone attainment date. The chosen 2007 attainment date reflects the statutory attainment date for the HGA area, as the DFW area is downwind of the HGA area and is affected by transport from HGA.

V. Administrative Requirements:

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this proposed action is not a "significant regulatory action" and therefore is not subject to review by the Office

of Management and Budget. This proposed action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et. seq.). Because this rule proposes to approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4). For the same reason, this proposed rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This proposed rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and

responsibilities established in the Clean Air Act. This proposed rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA=s role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. The proposed rule does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this proposed rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. The EPA has complied

with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the Attorney General-S Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings@issued under the executive order. This proposed rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Attainment, Hydrocarbons, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 et seq.

Dated:	Gregg A. Cooke,
	Regional Administrator,
	Region 6.